

## PERMEABLE RUBBER SEAL

Publication number: JP6328828 (A)

Publication date: 1994-11-29

Inventor(s): YAMAMOTO TAKANOBU

Applicant(s): SANBII KK

**Classification:**

- international: B41K1/50; B41K1/00; (IPC1-7): B41K1/50

- European:

Application number: JP19930294257 19931029

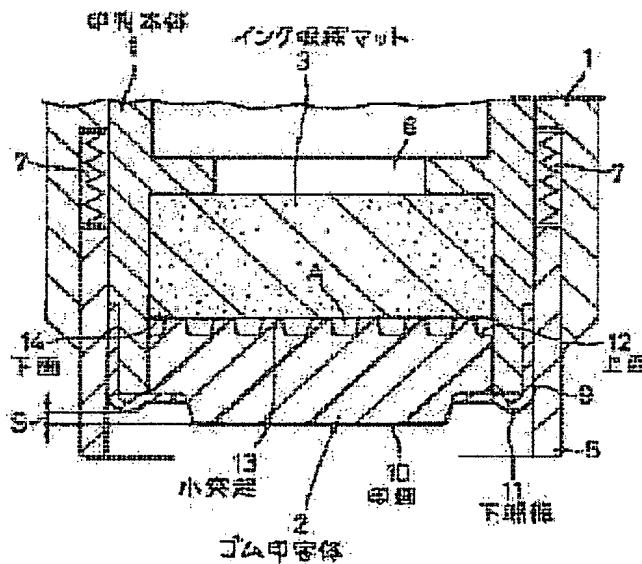
Priority number(s): JP19930294257 19931029

**Also published as:**

JP3028359 (B2)

**Abstract of JP 6328828 (A)**

PURPOSE: To provide a printing surface height adjusting function to a rubber printing body per se in a permeable rubber seal. CONSTITUTION: A porous rubber printing body 2 is fixed to the lower end of a seal body 1 through fastening 9. In the seal body 1, an ink occluding mat 3 is disposed on the rubber printing body 2. A large number of small projections 13 are integrally molded all over a top surface 12 of the rubber printing body 2. The top surface 12 of the rubber printing body 2 is brought into contact with a lower surface 14 of the ink occluding mat 3 through the group of the small projections 13. In this manner, the group of the small projections 13 is compressed and deformed prior to the rubber printing body 2 at the time of sealing. The height variation of a printing surface 10 can be absorbed by the amount of the compression deformation.; Therefore, there is no need for a projection dimension S of the printing surface 10 to be strictly set. Thus, the seal can be produced at a low cost and perform continuous sealing with an invariant sharpness.



Data supplied from the esp@cenet database — Worldwide

**\* NOTICES \***

JP0 and INPIT are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

---

**CLAIMS**

---

**[Claim(s)]**

[Claim 1]In an osmosis rubber stamp seal currently allocated so that the porous rubber stamp character style 2 may be fixed to a lower end of the main part 1 of a stamp and the ink occlusion mat 3 may be located on the rubber stamp character style 2 in the main part 1 of a stamp, An osmosis rubber stamp seal, wherein many small projected parts 13 are formed in the upper surface 12 of the rubber stamp character style 2 over the whole surface at one and the upper surface 12 of the rubber stamp character style 2 touches the undersurface 14 of the ink occlusion mat 3 via small projected part 13 group.

[Claim 2]In an osmosis rubber stamp seal arranged so that the porous rubber stamp character style 2 may be fixed to a lower end of the main part 1 of a stamp and the ink occlusion mat 3 may be located on the rubber stamp character style 2 in the main part 1 of a stamp, An osmosis rubber stamp seal in which the cushion mat 20 which has elasticity is put rather than the rubber stamp character style 2 between the rubber stamp character style 2 and the ink occlusion mat 3, and many dipping holes 23 are formed in the cushion mat 20 over the whole surface.

---

[Translation done.]

**\* NOTICES \***

JPO and INPIT are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

---

**DETAILED DESCRIPTION**

---

**[Detailed Description of the Invention]****[0001]**

**[Industrial Application]**This invention relates to the osmosis rubber stamp seal which equipped the lower end of the main part of a stamp with the porous rubber stamp character style which enables continuation seal.

**[0002]**

**[Description of the Prior Art]**For example, in the osmosis rubber stamp seal for address seal whose stamp face of a lower end is comparatively large. As generally conventionally shown in drawing 6, the porous rubber stamp character style 2 is fixed to the lower end of the main part 1 of a stamp via the fastening plate 9, and it has allotted so that the undersurface 14 of this may contact the upper surface 12 of the rubber stamp character style 2 completely in the ink occlusion mat 3 in the main part 1 of a stamp. According to this, occlusion of the ink is beforehand supplied and carried out to the ink occlusion mat 3 from the upper part, and the rubber stamp character style 2 is made to shift to use with this ink. However, since the rubber stamp character style 2 was porosity, it was easy to carry out the compression set of it, and it has set the projection dimension S S of the stamp face 10 of a lower end, i.e., the size between the fastening plate 9 and the stamp face 10, as 0.2-0.3 mm. If this projection dimension S is too large, the stamp face 10 will carry out a compression set superfluously at the time of seal, a seal carries out shape collapse, and ink is solid \*\*\*\*. It is because it will become seal impossible or a blur will appear in a seal, if the projection dimension S is too small.

**[0003]**

**[Problem(s) to be Solved by the Invention]**However, in order to manage the above-mentioned projection dimension S severely, it is necessary to raise the manufacturing accuracy of the main part 1 of a stamp, the rubber stamp character style 2, the fastening plate 9, etc., and to also secure attachment accuracy, in productivity, a yield, etc., this worsens, and the unit price of a product becomes high as a result. But member mark of form [ the height control mechanism of a stamp face / in the main part 1 of a stamp ]

increase, and a manufacturing cost attaches it highly.

[0004]Then, even if the purpose of this invention is provided with an ink occlusion mat and rubber stamp character style and is in the projection dimension of the stamp face of the porous rubber stamp character style from the main part of a stamp with Bala in the osmosis rubber stamp seal in which continuation seal is possible, it absorbs with this Bala by a simple means, and is to enable always clear seal.

[0005]

[Means for Solving the Problem]In an osmosis rubber stamp seal arranged so that this invention may have fixed the porous rubber stamp character style 2 to a lower end of the main part 1 of a stamp and the ink occlusion mat 3 may be located on the rubber stamp character style 2 in the main part 1 of a stamp, Many small projected parts 13 are formed in the upper surface 12 of the rubber stamp character style 2 over the whole surface at one, and it is made for the upper surface 12 of the rubber stamp character style 2 to contact the undersurface 14 of the ink occlusion mat 3 via small projected part 13 group. Or it replaces with providing small projected part 13 group in the rubber stamp character style 2, and the cushion mat 20 which has elasticity rather than the rubber stamp character style 2 is put between the rubber stamp character style 2 and the ink occlusion mat 3, and many dipping holes 23 are formed in it over the whole surface at this cushion mat 20.

[0006]

[Function]The porous rubber stamp character style 2 is rich in compression-set nature from the first. Therefore, if the stamp face 10 is pressed in space, a compression set will be previously carried out from each small projected part 13 by the reaction force. Therefore, even if it sets up the projection dimension S of the stamp face 10 more greatly than before, the size error is absorbed by the compression set of small projected part 13 group. Since each small projected part 13 is always in contact with the ink occlusion mat 3, whenever the ink in the rubber stamp character style 2 runs short, it is not restricted to the time when the compression set of the small projected part 13 is carried out, but ink flows in the rubber stamp character style 2 from the ink occlusion mat 3 via each small projected part 13 group. In the method by which the cushion mat 20 intervenes between the rubber stamp character style 2 and the ink occlusion mat 3, this mat 20 precedes, a compression set is carried out and the same role as small projected part 13 group is played. At the time of seal, the undersurface 14 of the ink occlusion mat 3 and the upper surface 12 of the rubber stamp character style 2 contact via each dipping hole 23, and the ink of the ink occlusion mat 3 shifts to the rubber stamp character style 2 now. When this [cushion mat 20] itself has dipping nature, each dipping hole 23 compensates shortage of the dipping nature of ink.

[0007]

[Effect of the Invention]Since small projected part 13 group or the cushion mat 20 of a large number provided in one precedes with the upper surface 12 of the rubber stamp character style 2 at the time of seal and carries out a compression set to it in this invention, Even if it

sets up the projection dimension S of the stamp face 10 more greatly than before, the error of said size S will be absorbed by the compression set of small projected part 13 group or the cushion mantle 20, and always clear continuation seal is attained. That is, since tolerance level of the process tolerance of the rubber stamp character style 2, the fastening plate 9, etc. thru/or attachment accuracy is made widely, without causing deterioration of quality, productivity improves and an osmosis rubber stamp seal can be provided cheaply.

[0008]

[Example]

(The 1st example) Drawing 1 thru/or drawing 4 show the 1st example of the osmosis rubber stamp seal concerning this invention, has fixed the porous rubber stamp character style 2 to the lower end of the square-shaped main part 1 of a stamp, in the main part 1 of a stamp, locates the ink occlusion mat 3 above the rubber stamp character style 2, and has allocated it.

[0009]In drawing 2, the upper bed of the main part 1 of a stamp is equipped with the cap 4 of the square shape which served as the grip part, enabling free attachment and detachment, the square-shaped stand 5 plans the slip off stop to a lower part, and the lower end side of the main part 1 of a stamp is equipped with it free [ a vertical slide ]. If the cap 4 is removed, ink can be supplied to the ink occlusion mat 3 from the upper part via ink droplet Shimokuchi 6. With the compression spring 7 with which it equipped between the upper bed of this, and the main part 1 of a stamp, the stand 5 projects caudad and is energized.

[0010]In drawing 2, the rubber stamp character style 2 is fabricated with the rubber material of the porosity which has a continuation stoma, and is fixed to the main part 1 of a stamp via the fastening plate 9. The lower end edge of the fastening plate 9 is the lower end edge 11 of the main part 1 of a stamp, and the stamp face 10 of the lower end of the rubber stamp character style 2 has projected down this lower end edge 11.

[0011]The ink occlusion mat 3 is formed in porosity by vinyl acetate etc. The porosity and pore diameter of the ink occlusion mat 3 are larger than that of the rubber stamp character style 2, rather than the rubber stamp character style 2, it is hard, and the ink included in the ink occlusion mat 3 shifts and goes to the rubber stamp character style 2 with use.

[0012]At the time of non-use, as shown in drawing 1, the lower part of the stand 5 has projected under the main part 1 of a stamp with the compression spring 7.

The stamp face 10 of the rubber stamp character style 2 is prevented from touching space etc.

If the lower end opening part of reliance of the stand 5 is in space when using it and the main part 1 of a stamp is pushed from the upper part, the spring power of the compression spring 7 will be resisted, the stand 5 will go up, and the stamp face 10 will contact space.

[0013]As shown in drawing 1, formed protruding of many small projected parts 13 is carried out to the upper surface 12 of the rubber stamp character style 2 every constant interval over the whole surface at one, and it was made for the upper surface 12 of the rubber

stamp character style 2 to contact the flat undersurface 14 of the ink occlusion mat 3 via small projected part 13 group of this in this osmosis rubber stamp seal. In drawing 3, length [ of one side ] G formed each of that small projected part 13 in the square shape 1.0 mm and whose height H are 0.7 mm, and it set the allocation pitch P to about 2.0 mm. Within the limits of 0.7-1.0 mm, height H of each small projected part 13 can be made to be able to respond to the size of the stamp face 10, and can be changed. And the size S between the lower end edge 11 of the main part 1 of a stamp and the stamp face 10 was set as 0.3-0.5 mm. The projection dimension S of this stamp face 10 is a little larger than conventional it.

[0014]In drawing 4, if the stamp face 10 is forced on space until the lower end edge 11 of the main part 1 of a stamp \*\*\*\* in space, first, it precedes, and each small projected part 13 group will carry out a compression set, and will absorb the compression-set power in which it is added now to the stamp face 10. That is, the porous rubber stamp character style 2 is further apt to carry out the compression set of each small projected part 13 with a small cross-section area, although it is rich in compression-set nature from the first. The space A between the small projected parts 13.13 promotes the compression set of each small projected part 13. Incidentally, when each small projected part 13 carries out a compression set, it will be in the state where said space A was crushed, and the upper surface 12 of the rubber stamp character style 2 will contact the undersurface 14 of the ink occlusion mat 3 almost extensively. Therefore, even if it sets up the projection dimension S of the stamp face 10 more greatly than before, small projected part 13 group precedes, and since a compression set is carried out, excessive compression-set power does not reach the stamp face 10. As a result, the clear seal without the shape collapse of a seal or stickiness of ink can be performed. When putting in another way, since the above-mentioned size S was set as the size more greatly than before and was set, the osmosis rubber stamp seal has been manufactured without having attached to the process tolerance of the main part 1 of a stamp, the rubber stamp character style 2, the fastening plate 9, etc., and it, and receiving big influence in accuracy.

[0015]The ink of an applicable portion's being impregnated is pressed out by said space A because each small projected part 13 carries out a compression set. Since each small projected part 13 is always in contact with the ink occlusion mat 3 at it also including the time of non-use, if the ink in the rubber stamp character style 2 decreases in number, ink will permeate and go to the rubber stamp character style 2 from the ink occlusion mat 3 via these small projected parts 13, and continuation seal will be enabled. Since said space A functions also as ink \*\*\*\*\*, its total amount of the ink impregnated in a stamp increases, and its clear number of times of seal also increases.

[0016]The small projected part 13 may be made into a semi-sphere not only in a square shape, for example. A size, an arrangement space, etc. of the small projected part 13 make a size, a raw material, etc. of the stamp face 10 correspond, and can be changed suitably.

[0017](The 2nd example) Drawing 5 shows the 2nd example of the osmosis rubber stamp seal concerning this invention, and has put it in the cushion mat 20 of continuation porosity

which has elasticity rather than the rubber stamp character style 2 between the rubber stamp character style 2 with the flat upper surface 12, and the ink occlusion mat 3 with the flat undersurface 14. That upper surface 21 and undersurface 22 are carrying out field contact of this cushion mat 20 at the undersurface 14 of the ink occlusion body 3, and the upper surface 12 of the rubber stamp character style 2, respectively.

The dipping hole 23 of a large number penetrated to a sliding direction is formed over the whole surface.

Within the limits of 0.5-1.0 mm, the thickness of the cushion mat 20 is determined according to the size of the stamp face 10. Other composition was made to be the same as that of the 1st example.

[0018]According to this, at the time of seal, it precedes, and the cushion mat 20 carries out a compression set, and absorbs the compression-set power in which it is added to the stamp face 10. Therefore, even if it sets up more greatly than before said projection dimension S of the stamp face 10 also in this case, the clear continuation seal without mold collapse or stickiness of ink can be performed. The ink in the ink occlusion mat 3 has shifted to the rubber stamp character style 2 via the cushion mat 20 which has dipping nature. Moreover, the undersurface 14 side of the ink occlusion mat 3 contacts the upper surface of the rubber stamp character style 2 via many dipping holes 23 by the compression set of the cushion mat 20, and it promotes that ink shifts to the rubber stamp character style 2 side from the ink occlusion mat 3 side now. Therefore, the elastic sponge body which does not have the usual dipping nature depending on the case may be used for this [ cushion mat 20 ] itself.

---

[Translation done.]

**\* NOTICES \***

JPO and INPIT are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

---

**DESCRIPTION OF DRAWINGS**

---

**[Brief Description of the Drawings]**

[Drawing 1]It is a vertical section front view of an important section.

[Drawing 2]It is the whole appearance perspective view.

[Drawing 3]the upper surface side of rubber stamp character style is shown -- it is a notching perspective view in part.

[Drawing 4]It is a vertical section front view of the important section at the time of use.

[Drawing 5]It is a vertical section front view of the important section in the 2nd example.

[Drawing 6]It is a vertical section front view of a conventional example.

**[Description of Notations]**

1 The main part of a stamp

2 Rubber stamp character style

3 Ink occlusion mat

10 Stamp face

11 The lower end edge of the main part of a stamp

12 The upper surface of rubber stamp character style

13 Small projected part

14 The undersurface of an ink occlusion mat

---

**[Translation done.]**

**\* NOTICES \***

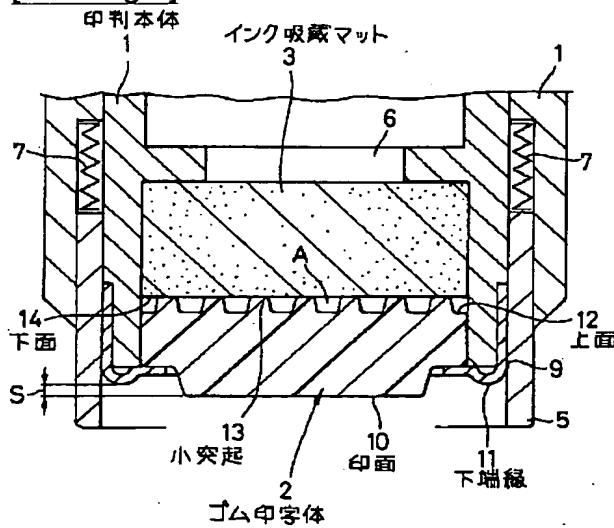
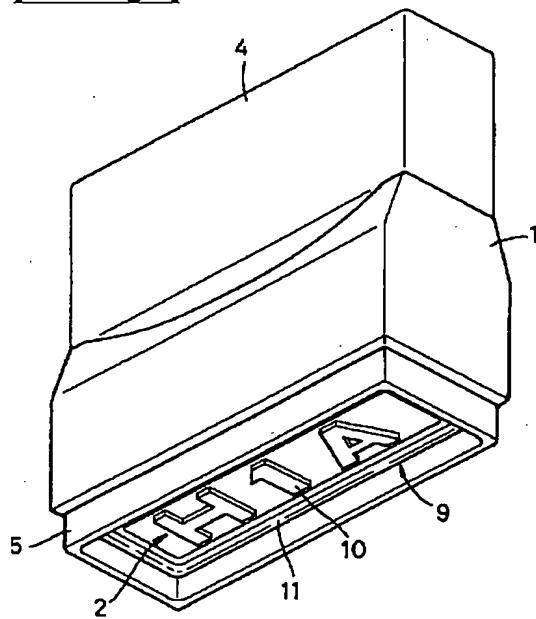
JPO and INPIT are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

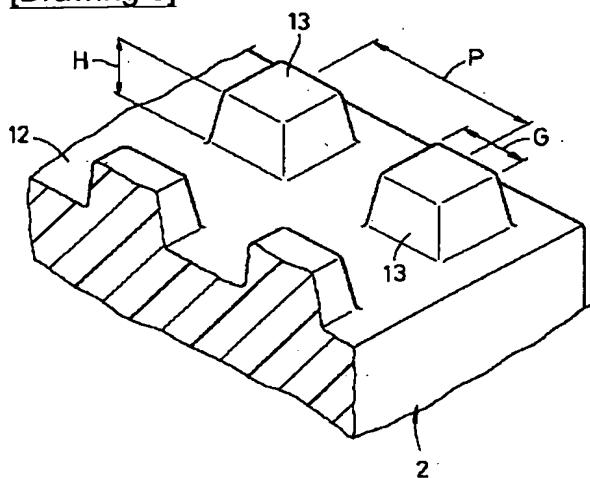
---

**DRAWINGS**

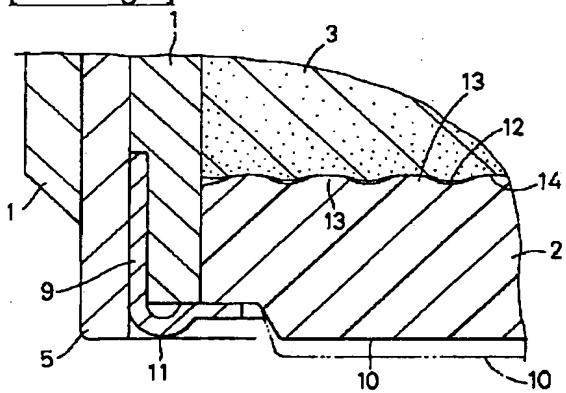
---

**[Drawing 1]****[Drawing 2]**

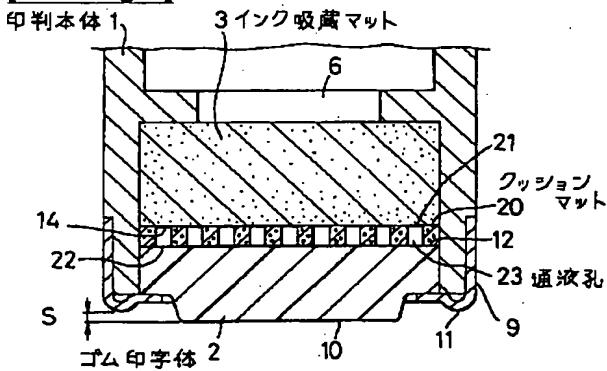
[Drawing 3]



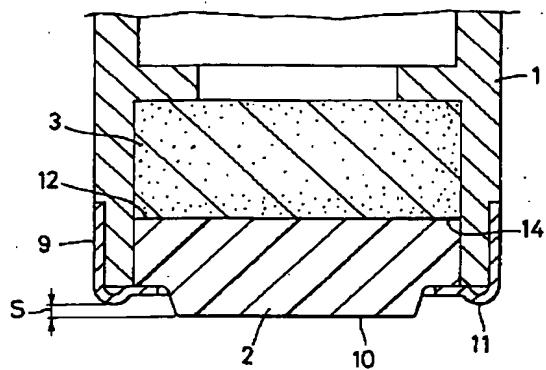
[Drawing 4]



[Drawing 5]



[Drawing 6]



---

[Translation done.]

**\* NOTICES \***

JPO and INPIT are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. \*\*\*\* shows the word which can not be translated.
3. In the drawings, any words are not translated.

---

**WRITTEN AMENDMENT**

---

**[Written amendment]**

[Filing date] December 3, Heisei 5

[Amendment 1]

[Document to be Amended] Specification

[Item(s) to be Amended] Claim

[Method of Amendment] Change

[Proposed Amendment]

[Claim(s)]

[Claim 1] In an osmosis rubber stamp seal which has fixed to the main part 1 of a stamp the porous rubber stamp character style 2 which has the stamp face 10 in a lower end, An osmosis rubber stamp seal, wherein many small projected parts 13 are formed in the upper surface 12 of the rubber stamp character style 2 at one.

[Claim 2] In an osmosis rubber stamp seal currently allocated so that the porous rubber stamp character style 2 may be fixed to a lower end of the main part 1 of a stamp and the ink occlusion mat 3 may be located on the rubber stamp character style 2 in the main part 1 of a stamp,

Many small projected parts 13 are formed in the upper surface 12 of the rubber stamp character style 2 over the whole surface at one,

An osmosis rubber stamp seal, wherein the upper surface 12 of the rubber stamp character style 2 touches the undersurface 14 of the ink occlusion mat 3 via small projected part 13 group.

[Claim 3] In an osmosis rubber stamp seal arranged so that the porous rubber stamp character style 2 may be fixed to a lower end of the main part 1 of a stamp and the ink occlusion mat 3 may be located on the rubber stamp character style 2 in the main part 1 of a stamp,

Between the rubber stamp character style 2 and the ink occlusion mat 3, the cushion mat 20 which has elasticity rather than the rubber stamp character style 2 is put,

An osmosis rubber stamp seal in which many dipping holes 23 are formed in the cushion mat 20 over the whole surface.

[The amendment 2]

[Document to be Amended]Specification

[Item(s) to be Amended]0004

[Method of Amendment]Change

[Proposed Amendment]

[0004]Then, even if the purpose of this invention equips the main part of a stamp with porous rubber stamp character style and is in the projection dimension of the stamp face of the rubber stamp character style from the main part of a stamp with Bala in the osmosis rubber stamp seal in which continuation seal is possible, it absorbs with this Bala by a simple means, and is to enable always clear seal.

[Amendment 3]

[Document to be Amended]Specification

[Item(s) to be Amended]0005

[Method of Amendment]Change

[Proposed Amendment]

[0005]

[Means for Solving the Problem]In an osmosis rubber stamp seal which has fixed the porous rubber stamp character style 2 to which this invention has the stamp face 10 on the main part 1 of a stamp in a lower end, many small projected parts 13 are formed in the upper surface 12 of the rubber stamp character style 2 at one.Or in an osmosis rubber stamp seal arranged so that the porous rubber stamp character style 2 may be fixed to a lower end of the main part 1 of a stamp and the ink occlusion mat 3 may be located on the rubber stamp character style 2 in the main part 1 of a stamp, Many small projected parts 13 are formed in the upper surface 12 of the rubber stamp character style 2 over the whole surface at one, and it is made for the upper surface 12 of the rubber stamp character style 2 to contact the undersurface 14 of the ink occlusion mat 3 via small projected part 13 group. Or it replaces with providing small projected part 13 group in the rubber stamp character style 2, and the cushion mat 20 which has elasticity rather than the rubber stamp character style 2 is put between the rubber stamp character style 2 and the ink occlusion mat 3, and many dipping holes 23 are formed in it over the whole surface at this cushion mat 20.

[Amendment 4]

[Document to be Amended]Specification

[Item(s) to be Amended]0006

[Method of Amendment]Change

[Proposed Amendment]

[0006]

[Function]The porous rubber stamp character style 2 is rich in compression-set nature from

the first. Therefore, if the stamp face 10 is pressed in space, a compression set will be previously carried out from each small projected part 13 by the reaction force. Therefore, even if it sets up the projection dimension S of the stamp face 10 more greatly than before, the size error is absorbed by the compression set of small projected part 13 group. When being arranged so that the ink occlusion mat 3 may be located on the rubber stamp character style 2 in the main part 1 of a stamp, the ink occlusion mat 3 works as a backup member of the rubber stamp character style 2, and occlusion of the ink is supplied and carried out to the ink occlusion mat 3 from the upper part. Since each small projected part 13 is always in contact with the ink occlusion mat 3 in that case, whenever the ink in the rubber stamp character style 2 runs short, it is not restricted to the time when the compression set of the small projected part 13 is carried out, but ink flows in the rubber stamp character style 2 from the ink occlusion mat 3 via each small projected part 13 group. In the method by which the cushion mat 20 intervenes between the rubber stamp character style 2 and the ink occlusion mat 3, this mat 20 precedes, a compression set is carried out and the same role as small projected part 13 group is played. At the time of seal, the undersurface 14 of the ink occlusion mat 3 and the upper surface 12 of the rubber stamp character style 2 contact via each dipping hole 23, and the ink of the ink occlusion mat 3 shifts to the rubber stamp character style 2 now. When this [ cushion mat 20 ] itself has dipping nature, each dipping hole 23 compensates shortage of the dipping nature of ink.

---

[Translation done.]

(19)日本国特許庁 (JP)

(12) 公開特許公報 (A)

(11)特許出願公開番号

特開平6-328828

(43)公開日 平成6年(1994)11月29日

(51)Int.Cl.<sup>5</sup>

B 41 K 1/50

識別記号 庁内整理番号

B 6863-2C

Z 6863-2C

F I

技術表示箇所

(21)出願番号

特願平5-294257

実願平5-31951の変更

(22)出願日

平成5年(1993)5月21日

審査請求 未請求 請求項の数2 FD (全6頁)

(71)出願人 000106461

サンビー株式会社

大阪府大阪市天王寺区石ヶ辻町13番10号

(72)発明者 山本 孝信

大阪府大阪市天王寺区石ヶ辻町13番10号

サンビー株式会社内

(74)代理人 弁理士 折寄 武士

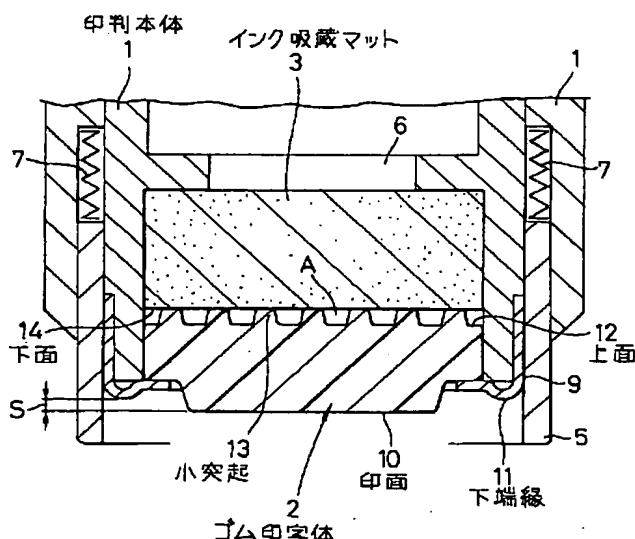
(54)【発明の名称】 浸透ゴム印判

(57)【要約】

【目的】 浸透ゴム印判において、ゴム印字体これ自体に印面の高さ調整機能を持たせる。

【構成】 印判本体1の下端に多孔性のゴム印字体2を止め金具9を介して固定する。印判本体1内にはゴム印字体2上にインク吸収マット3を配置する。ゴム印字体2の上面12に多数の小突起13を全面にわたって一体に成形する。ゴム印字体2の上面12は、小突起13群を介してインク吸収マット3の下面14に接触させておく。

【効果】 撥印時に小突起13群が先行して圧縮変形するので、この圧縮変形量分だけ印面10の高さのバラつきを吸収できる。従って、印面10の突出寸法Sは厳密に設定せずともよく、安価に製作できて常に鮮明な連続捺印が可能となる。



**【特許請求の範囲】**

**【請求項1】** 印判本体1の下端に多孔性のゴム印字体2を固定しており、印判本体1内にインク吸蔵マット3がゴム印字体2上に位置するよう配設されている浸透ゴム印判において、ゴム印字体2の上面12に多数の小突起13が全面にわたって一体に形成されており、ゴム印字体2の上面12が小突起13群を介してインク吸蔵マット3の下面14に接触していることを特徴とする浸透ゴム印判。

**【請求項2】** 印判本体1の下端に多孔性のゴム印字体2を固定しており、印判本体1内にインク吸蔵マット3がゴム印字体2上に位置するよう配設されている浸透ゴム印判において、ゴム印字体2とインク吸蔵マット3との間に、ゴム印字体2よりも弹性を有するクッションマット20が挟み込まれており、クッションマット20に多数の通液孔23が全面にわたって設けられている浸透ゴム印判。

**【発明の詳細な説明】****【0001】**

**【産業上の利用分野】** 本発明は、印判本体の下端に連続捺印を可能とする多孔性のゴム印字体を備えた浸透ゴム印判に関する。

**【0002】**

**【従来の技術】** 例えば、下端の印面が比較的大きい住所捺印用の浸透ゴム印判では、従来一般に図6に示すごとく印判本体1の下端に多孔性ゴム印字体2を止め金具9を介して固定し、印判本体1内にインク吸蔵マット3をこれの下面14がゴム印字体2の上面12に全面接触するよう配してある。これによればインク吸蔵マット3にインクを予め上方より供給して吸蔵させておき、このインクを使用に伴ってゴム印字体2に移行させている。しかし、ゴム印字体2は多孔性であるから圧縮変形しやすく、下端の印面10の突出寸法S、つまり止め金具9と印面10との間の寸法Sは、0.2~0.3mmに設定している。この突出寸法Sが大き過ぎると捺印時に印面10が過剰に圧縮変形して印影が型崩れしインクがベタつく。突出寸法Sが小さ過ぎると捺印不能になったり、印影にかすれが出るからである。

**【0003】**

**【発明が解決しようとする課題】** しかし、上記の突出寸法Sを厳しく管理するためには、印判本体1、ゴム印字体2および止め金具9などの製作精度を高め、組み付け精度も確保する必要があり、これが生産性や歩留まりなどが悪くし、結果的に製品の単価が高くなる。かといって、印面の高さ調節機構を印判本体1内に設けるのも、部材点数が増えて製作コストが高くつく。

**【0004】** そこで本発明の目的は、インク吸蔵マットおよびゴム印字体を備えていて連続捺印が可能な浸透ゴ

ム印判において、印判本体からの多孔性ゴム印字体の印面の突出寸法にバラつきがあっても、このバラつきを簡便な手段で吸収して、常に鮮明な捺印を可能とするにある。

**【0005】**

**【課題を解決するための手段】** 本発明は、印判本体1の下端に多孔性のゴム印字体2を固定しており、印判本体1内にインク吸蔵マット3がゴム印字体2上に位置するよう配設されている浸透ゴム印判において、ゴム印字体2の上面12に多数の小突起13を全面にわたって一体に形成し、ゴム印字体2の上面12が小突起13群を介してインク吸蔵マット3の下面14に接触するようにしたのである。又は、ゴム印字体2に小突起13群を設けるに代えて、ゴム印字体2とインク吸蔵マット3との間に、ゴム印字体2よりも弹性を有するクッションマット20を挟み込み、このクッションマット20に多数の通液孔23を全面にわたって設ける。

**【0006】**

**【作用】** 多孔性のゴム印字体2は、もともと圧縮変形性に富んでいる。従って、その印面10を紙面に押圧すると、その反力で各小突起13から先に圧縮変形する。従って、印面10の突出寸法Sを従来よりも大きめに設定しても、その寸法誤差は小突起13群の圧縮変形で吸収される。各小突起13は常にインク吸蔵マット3と接しているので、ゴム印字体2内のインクが不足すると、小突起13が圧縮変形されているときに限らず、常に各小突起13群を介してインク吸蔵マット3からゴム印字体2内にインクが流入する。ゴム印字体2とインク吸蔵マット3との間にクッションマット20が介在する方式では、該マット20が先行して圧縮変形し、小突起13群と同じ役割を果たす。捺印時には各通液孔23を介してインク吸蔵マット3の下面14とゴム印字体2の上面12とが接触し、これでインク吸蔵マット3のインクがゴム印字体2に移行する。なお、クッションマット20これ自体が通液性を有するときは、各通液孔23がインクの通液性の不足を補う。

**【0007】**

**【発明の効果】** 本発明では、ゴム印字体2の上面12に一体に設けた多数の小突起13群、またはクッションマット20が捺印時に先行して圧縮変形するので、印面10の突出寸法Sを従来より大きめに設定しても、小突起13群又はクッションマット20の圧縮変形で前記寸法Sの誤差を吸収することになり、常に鮮明な連続捺印が可能になる。すなわち、品質の低下を招くことなしに、ゴム印字体2や止め金具9などの加工精度ないし組付け精度の許容範囲が広くできるので、生産性が向上し、浸透ゴム印判を安価に提供できる。

**【0008】****【実施例】**

(第1実施例) 図1ないし図4は本発明に係る浸透ゴ

印判の第1実施例を示しており、角形の印判本体1の下端に多孔性のゴム印字体2を固定しており、印判本体1内にインク吸蔵マット3をゴム印字体2の上方に位置させて配設してある。

【0009】図2において印判本体1の上端には握り部を兼ねた角形のキャップ4が着脱自在に装着されており、印判本体1の下端側に角形のスタンド5が下方への抜け止めを図って上下スライド自在に装着してある。キャップ4を取り外すと、インク滴下口6を介してインク吸蔵マット3に上方からインクが補給できる。スタンド5は、これの上端と印判本体1との間に装着した圧縮スプリング7で下方に突出付勢されている。

【0010】図2において、ゴム印字体2は連続気孔を有する多孔質のゴム材で成形されており、止め金具9を介して印判本体1に固定してある。止め金具9の下端縁が印判本体1の下端縁11になっており、ゴム印字体2の下端の印面10が該下端縁11の下方に突出している。

【0011】インク吸蔵マット3は酢酸ビニルなどで多孔質に形成されている。インク吸蔵マット3はその気孔率および気孔径がゴム印字体2のそれよりも大きく、ゴム印字体2よりも硬質であって、インク吸蔵マット3に含ませたインクはゴム印字体2に使用に伴って移行していく。

【0012】不使用時には、図1に示すようにスタンド5の下部が圧縮スプリング7で印判本体1の下方に突出しており、ゴム印字体2の印面10が紙面などに触れるのを防止している。使用に際してスタンド5の下端開口を紙面に当てがい、印判本体1を上方から押すと、圧縮スプリング7のばね力に抗してスタンド5が上昇し、印面10が紙面に接触する。

【0013】かかる浸透ゴム印判において、図1に示すようにゴム印字体2の上面12に多数の小突起13を全面にわたって一定間隔置きに一体に突出形成し、ゴム印字体2の上面12がこれの小突起13群を介してインク吸蔵マット3の平坦な下面14に接触するようにした。図3において、その各小突起13は一辺の長さGが1.0mm、高さHが0.7mmの角形に形成し、その配設ピッチPを約2.0mmとした。各小突起13の高さHは0.7~1.0mmの範囲内で印面10の大きさに対応させて変更することができる。そして、印判本体1の下端縁11と印面10との間の寸法Sは、0.3~0.5mmに設定した。この印面10の突出寸法Sは従来のそれよりも大きめである。

【0014】図4において、印判本体1の下端縁11が紙面に接するまで印面10を紙面に押し付けると、まず各小突起13群が先行して圧縮変形し、これで印面10に加わる圧縮変形力を吸収する。すなわち、多孔性のゴム印字体2は、もともと圧縮変形性に富んでいるが、断面積の小さい各小突起13は更に圧縮変形しやすい。小突起13・13間の空間Aは各小突起13の圧縮変形

を助長する。因に、各小突起13が圧縮変形したとき、前記空間Aがつぶされた状態となり、ゴム印字体2の上面12がインク吸蔵マット3の下面14にほぼ全面的に接触する。従って、印面10の突出寸法Sを従来より大きく設定しても、小突起13群が先行して圧縮変形するので、印面10に過度の圧縮変形力が及ばない。その結果、印影の型崩れやインクのべたつきがない鮮明な捺印が行える。換言すれば、上記寸法Sを従来より大きめに寸法に設定しておけるから、印判本体1、ゴム印字体2、止め金具9などの加工精度、それに組み付け精度に大きな影響を受けることなく浸透ゴム印判を製作できた。

【0015】各小突起13が圧縮変形することで、該当部分に含浸のインクは前記空間Aに絞り出される。それに各小突起13は不使用時も含めて常にインク吸蔵マット3に接しているので、ゴム印字体2内のインクが減少すれば、これらの小突起13を介してインク吸蔵マット3からゴム印字体2にインクが浸透して行き、連続捺印を可能にする。前記空間Aはインク溜まりとしても機能するので、印判内に含浸されるインクの総量が増え、鮮明な捺印回数も多くなる。

【0016】小突起13は角形に限らず、例えば半球形にてもよい。小突起13の大きさや配置間隔なども印面10の大きさや素材などに対応させて適宜変更できる。

【0017】(第2実施例)図5は本発明に係る浸透ゴム印判の第2実施例を示しており、上面12が平坦なゴム印字体2と下面14が平坦なインク吸蔵マット3との間に、ゴム印字体2よりも弹性を有する連続多孔性のクッショニングマット20を挟み込んである。このクッショニングマット20は、その上面21および下面22がインク吸蔵マット3の下面14とゴム印字体2の上面12とにそれぞれ面接触しており、上下方向に貫通する多数の通液孔23を全面にわたって設けてある。クッショニングマット20の厚みは0.5~1.0mmの範囲内で、印面10の大きさに応じて決定する。その他の構成は第1実施例と同様にした。

【0018】これによれば捺印時にクッショニングマット20が先行して圧縮変形し、印面10に加わる圧縮変形力を吸収する。従って、この場合も印面10の前記突出寸法Sを従来より大きく設定しても、型くずれやインクのべたつきがない鮮明な連続捺印が行える。インク吸蔵マット3内のインクは、通液性を有するクッショニングマット20を介してゴム印字体2に移行している。そのうえで、クッショニングマット20の圧縮変形によりインク吸蔵マット3の下面14側が多数の通液孔23を介してゴム印字体2の上面に接触し、これでインク吸蔵マット3側からゴム印字体2側にインクが移行するのを助長する。従って、場合によってはクッショニングマット20これ自体には通常の通液性を有しない弹性スポンジ体を用いても

よい。

【図面の簡単な説明】

【図1】要部の縦断正面図である。

【図2】全体の外観斜視図である。

【図3】ゴム印字体の上面側を示す一部切り欠き斜視図である。

【図4】使用時における要部の縦断正面図である。

【図5】第2実施例における要部の縦断正面図である。

【図6】従来例の縦断正面図である。

\* 【符号の説明】

1 印判本体

2 ゴム印字体

3 インク吸収マット

10 印面

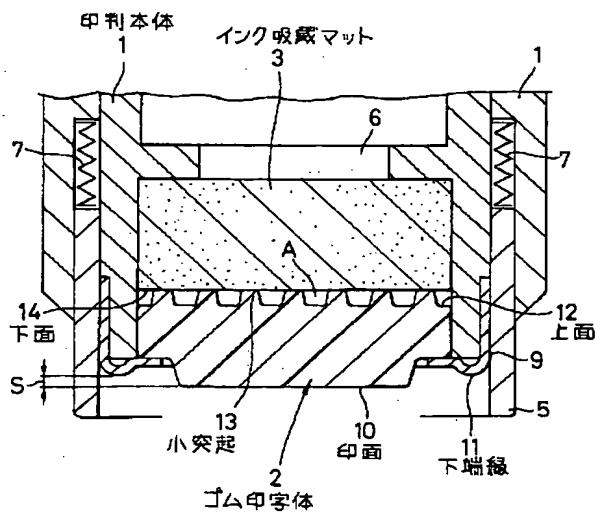
11 印判本体の下端縁

12 ゴム印字体の上面

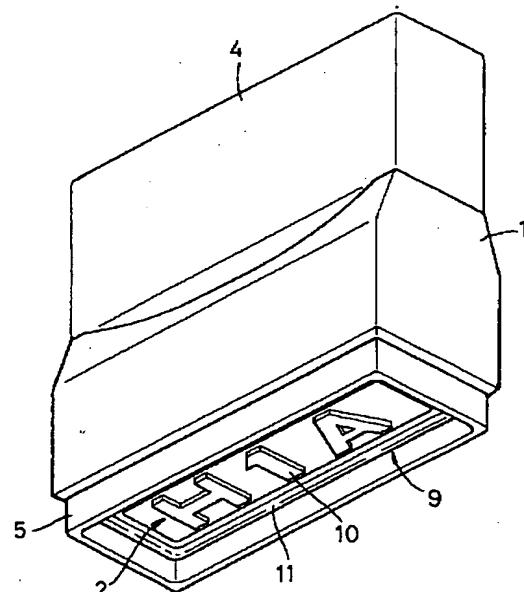
13 小突起

14 インク吸収マットの下面

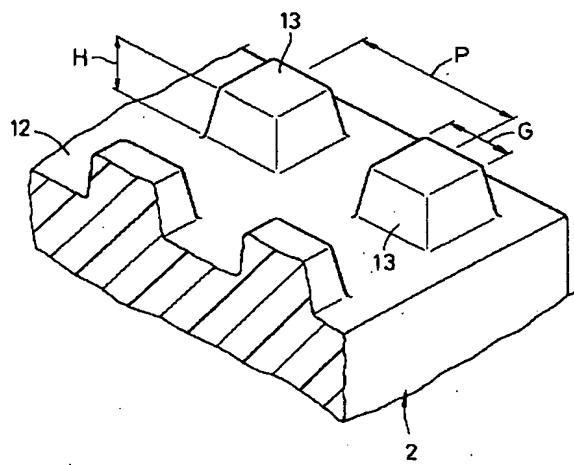
【図1】



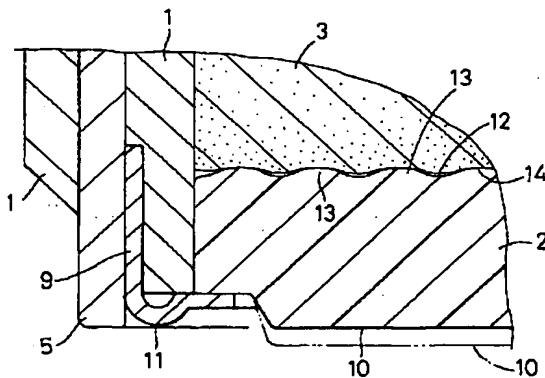
【図2】



【図3】



【図4】





**【補正内容】****【0006】**

**【作用】**多孔性のゴム印字体2は、もともと圧縮変形性に富んでいる。従って、その印面10を紙面に押圧すると、その反力で各小突起13から先に圧縮変形する。従って、印面10の突出寸法Sを従来よりも大きめに設定しても、その寸法誤差は小突起13群の圧縮変形で吸収される。印判本体1内にインク吸蔵マット3がゴム印字体2上に位置するよう配置されているときは、インク吸蔵マット3がゴム印字体2のバックアップ部材として働き、かつインク吸蔵マット3に上方からインクが補給されて吸蔵されている。その際、各小突起13は常にイン

ク吸蔵マット3と接しているので、ゴム印字体2内のインクが不足すると、小突起13が圧縮変形されているときに限らず、常に各小突起13群を介してインク吸蔵マット3からゴム印字体2内にインクが流入する。ゴム印字体2とインク吸蔵マット3との間にクッションマット20が介在する方式では、該マット20が先行して圧縮変形し、小突起13群と同じ役割を果たす。捺印時には各通液孔23を介してインク吸蔵マット3の下面14とゴム印字体2の上面12とが接触し、これでインク吸蔵マット3のインクがゴム印字体2に移行する。なお、クッションマット20これ自体が通液性を有するときは、各通液孔23がインクの通液性の不足を補う。